To Axime Services / CA France	Mr. Marc Combs	CA Brazil																																				
Description	Master Copy	Master Copy	Master Copy	length of userexit messages	Specification FUSER/FDIC/LIBIKARY Within processor	check at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection if CCID was entered if CCID-new at member selection	chark if snecification of INCLUDE XREF on ADD panel is correct	Allow STOM inclead of CAT as GENERATE action	allow of the Endevor without starting ENAT and without issuing a message	allow maintenance of PREDICT-lds longer than 10 characters	chark at member selection if COMMENT was entered if COMMENT = KEUUINED to set to system	import/export functions for MCT	supply example on how to add MCT entries	show correct FUSER/FDIC if no TYPE was specified	An and reset NATURAL environment / offer a possibility to set the environment / paul mount procession	COMMAND NATURAL	The CA Endavor shorts E/NAT allocations are not freed	when on the preparation on FNAT parameter menu	snow acuve systems of the part	SCL generation, specific of the incorrect	example user exit 92 (messagus) is incorrect example user exit 92 (messagus) is not incorrect element	SCL generation; specify Unit as upman comparation	Abort action if E/NA I gets an end coming come and a passet	Allow prefixes other than usen a to AAA Ethan Comments of the comments of	PDA for userexits (EN9400P) corrected	The definition of variables NDV-FROM-5Y51Em and NOV-100-100 in it migrating from ENAT version	changed from length 1 to 8, the new contracts from the parameter data area EN9400P.	1.2, you need to recatalig all your examination Objects	Support for PREUIC) Decemenation Operation Supported in addition to Files with Fields and Verifications:	I De IDIDARII UT N.C. C.	ODJECT TYPE OF Developed	opjectype N. Asymoso	object you PR Programs	object type RI Relationships	object type RP Reports	· object type SY Systems	object type US Users	I ne Memoes Conversion Looke
rections	1996-10-10	1996-11-21	1996-11-21	1996-04-11	1996-05-17	1006.05.17	4006 05 47	71-07-0861	71-50-9561	1996-05-26	1930-04-23	20-04-050	1880-02-03	20-00-086	1990-09-00	10-01-0881	10 01 0001	1930-10-01	1997-01-09	1997-01-13	1997-02-26	1997-04-04	1997-05-09	1997-05-15	1997-09-12								-				3	1997-09-12
Exhibit C - E/NAT® Versions, Enhancements, Correction	Serial # 0102009601D003	01020353	01020196100007	T																																		
rsions, Enh	Tape #		†	1	1																				1													
- E/NAT® Ve	C/E-Req., Flx				EN120CE001	EN120CE002	EN120CE005	FN120CE006	FN120CE007	EN120CE009	EN120CE010	EN120CE013	EN120CE014	EN120CE015	EN120CE017	EN120CE020		EN120CF021	EN120CF023	TANADOCEU25	EN LOCEUS	ENIZOCEUZA	ENIZOCEOS	ENTZUCEUSS	EN120CEU36													
Exhibit C	Version	1.20	1.20	1.20		12.1		\dagger	\dagger	1				T		T	<u> </u>		1/2/5	1	1	12.1	1	1		1.2.1			-									1.2.1

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Description The main enhancement available with this version of ENNAT is the new Member Conversion Table The main enhancement available with this version of ENNAT is the new Members (MCT). The MCT allows you to define a table with which it is possible to maintain PREDICT members within CA-Endevor with member ids longer than 10 characters (up to 32 characters). To maintain this table several new functions are available: Online functions for MCT maintenance SELECT DISPLAY	. ADD / UPDATE . DELETE . UNLOCK . Utility functions to export the conlents of the MCT to an external dataset (for mass functions) and to . Utility functions to export the conlents of the MCT to an external dataset (for mass functions) and to . UNLOAD	• LOAD To hold the MCT table the ENAT system file was extended. The MCT is in effect for all object types supported by ENAT (NATURAL and PREDICT). The MCT is in effect for all object types supported by ENAT (NATURAL and PREDICT). NATURAL COMMAND Handler In addition to the statements GENERATE and DELETE the new COMMAND NATURAL command or addition to the statements of the stature allows you to execute any NATURAL program.	program to execute additional functional logic e.g. during CENTLY CE. Entry SET ENAT now provides an entry function to set the execution environment an path defined to when executing your own programs within a processor within any environment or path defined to when executing your own programs within a processor within any environment or path defined to ENAT. You may use CA-Endevor variables to do this in a very standardized way. The SET entry allows ENAT. You may use CA-Endevor variables to set the execution environment to the FROM or TO you to use CA-Endevor variables. Another feature is to set the execution environment to a environment/stage/system combination. Another feature is to set the	Specific E/NAT path. E/NAT Documentation The documentation has been restructured. Messages are now described in a separate Messages The documentation has been restructured from Users Manual and Administrators Manual. Manual. The chapters Messages have been removed from Users Manual and Administrators Manual. E/NAT Messages Long messages / help on messages are now available in English.	ENAT Help The help system has been completely revised. Help is now available in English. The help information is stored within SYSERR in libraries ENHLPFC and ENHLPFL. ENAT Parameters On the selection menu the active physical NATURAL (ENAT systemfile id) is displayed to help those On the selection menu the active physical NATURAL (ENAT systemfile id) is displayed to help those users working with different ADABAS SVCs to determine in which environment they are working. The users working with different ADABAS SVCs to determine in which environment they are working. The
Deta Visit Nation 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	· · · · · · · · · · · · · · · · · · ·	1997-09-12 To 1997-09-12 Th 1997-09-12 NA	1997-09-12 En wh who will be seen a s		1997-09-12 E/ 1997-09-12 E/ O US
** BL-90					
#±					
C/E-Req., Fix					
Version		12.1	12.1	1.2.1	12.1

Emples	note and the second		ntaggigger personal george (Prior commeter pas cos co stago	and the state of
To		Chase / Mark Hopper CA Brazil / Rafael Lima Mrs. Terry Donovan		3
	Description ENNAT Generate Action Until this version of ENAT the onty action done within NATURAL during GENERATE of an executable Until this version of ENAT the onty action done within NATURAL during GENERATE of an executable Until this version of ENAT the onty action done with some onto the following options are available: NATURAL object was the CAT command. From now on the following options are available: option C CAT Catalog (as available until this version of ENAT) option S SAVE Save (leaves source only with NEW timestamp) option WSTOW Save & Catalog (leaves source with original timestamp / COPY and object with new option V CAT Copy & Catalog (leaves source with original timestamp / COPY and object timestamp / CAT) This option can be defined on system wide level. You can now define, that in addition to the object time stamp which is equal to the timestamp of the object).	Using Cycling to start CA-Endevor without ENA1 (and without starting) and the start CA-Endevor without ENA1 (and without starting the start CA-Endevor without ENATYAVISRCIB(ENDEVOR) should be used. It is now possible to use ENAT without any Using ENAT with other high level qualifiers than <userile <userile="" a="" action="" after="" all="" any="" are="" before="" build="" called="" copy="" dataset.="" done.<="" dummy="" enat="" environments="" exit="" high="" in="" internal="" level="" master="" modifications="" now="" possible="" provide="" qualifier="" settings="" td="" the="" ties="" to="" use="" used="" user="" where="" without=""><td>NAT0082 when invoking help. Sample user exit 92 has been corrected (wrong replacement of special characters during RE I MEVE). Sample user exit 92 has been corrected (wrong replacement of special characters during RE I MEVE). provide a before ENAT action user exit (see ENZ10CE043). provide a before ENAT action user exit (see ENZ10CE043). ISPF SERVICE CALL NOT ALLOWED DURING EXIT INVOCATION, empty members after adding ISPF SERVICE CALL NOT ALLOWED DURING EXIT INVOCATION, empty members after adding ISPF SERVICE CALL NOT ALLOWED DURING EXIT INVOCATION, empty members after adding problems during invocation of PREDICT problems durin</td><td>The new user exit U. the best continued string the best continued string the new user exit U. The second second string the best continued by the best cont</td></userile>	NAT0082 when invoking help. Sample user exit 92 has been corrected (wrong replacement of special characters during RE I MEVE). Sample user exit 92 has been corrected (wrong replacement of special characters during RE I MEVE). provide a before ENAT action user exit (see ENZ10CE043). provide a before ENAT action user exit (see ENZ10CE043). ISPF SERVICE CALL NOT ALLOWED DURING EXIT INVOCATION, empty members after adding ISPF SERVICE CALL NOT ALLOWED DURING EXIT INVOCATION, empty members after adding ISPF SERVICE CALL NOT ALLOWED DURING EXIT INVOCATION, empty members after adding problems during invocation of PREDICT problems durin	The new user exit U. the best continued string the best continued string the new user exit U. The second second string the best continued by the best cont
	1997-09-12	1997-09-12 1997-08-14 1997-08-25 1997-09-12 1997-10-22	1997-10-22 1997-10-22 1997-10-22 1997-10-27 1997-10-28 1997-11-10	1997-12-30
	# lei-ie/	0201009709E021		
	4000	300731		
	CIE-Red., Fix		ENZ10CE043 ENZ10CE044 ENZ10CE045 ENZ10CE046 ENZ10CE046 ENZ10CE047 ENZ10CE048 ENZ10CE048 ENZ10CE048	
	Version 12.1	12.1 12.1 2.1.082 2.1.081 2.1.081	2.1.0 2.1.0 2.1.0 2.1.0 2.1.0 2.1.0 2.1.0	2.1.0

To				•		Mrs Tarry Donovan															4
	Description User exit 72 is called after user exit 71 but before PREDICT (SYSDIC or SYSDICBE) is invoked. This is	useful to adapt the way the NATURAL State is sent to the second to the current releases. Itom the current releases. Items of ESIZE during GENERATE has be minimized. Items of ESIZE during GENERATE of a	Until this version of ENNAT the Global Data Area used by Ling. Until this version of ENNAT the Global Data Area used by Ling. NATURAL source. This sometimes caused problems. During GENERATE ENAT releases it's own GDA NATURAL source. This sometime of SAVE commands. This means that about all of NATURAL's ESIZE	during execution of the control of t	The new utility ENIFIX is shipped with Environ. It is possible to download and apply configuration it is possible to download and apply configuration it is possible to your mainframe. In case you need to shipment via e-mail or using a diskette. In addition it is possible to your mainframe. In case you need to shipment via our Web site and file transfer to your mainframe to show the mainframe using FTP or any other tool, Use this dataset as input for ENAT's NATURAL.	apply a fix, transfer it from the defined as FB with a LRECL of 253 bytes, simply executed as the ENIFIX utility, it must be defined as the ENIFIX trility, it must be defined as batch job and execute the module ENIFIX located in library EN. The input dataset must be allocated as	work file 1 (CMWKF01).	Master Copy Increase length of source lines transferred to CA-Endevor.	Add note in Inst. Manual: Min. TSO region size is of more in Installation tape.	ENENTRY and corresponding financial and a special financial and the apply a special	Map source is packed out 2.2 and NATURAL 2.3 environments without the fleed to they a	fix.	Allow specification of a new dimension of CA Endevor RC > 0.	Retrieve processing a recommendation of the second section of the second sections and work with large objects.	Provide an AFTER-LOGON user exit.	New user exit 94 / After Logon New user exit 94 / After Logon to allow execution of user defined code after a LOGON to a new	Ibrary was done, Sample EN9494X.	New parameter HLO in ENDETES in account to built using the USERID as the high level qualities. Until ENAT 2.1.1 workfile names in ENAT are built using the USERID as the high level that it was now do so by specifying it with the	Installations which want to use a different right in the second level qualifier in front of DSNAMES dult to HLQ parameter. The name entered here is added as high level qualifier.	SWItching TUSER/FDIG improved Switching TUSER/FDIG improved Switching to This solves several Switching to This solves several	problems caused by NATURAL Security. Switch is now done immediately area caused by NATURAL security. Switch is now done immediately area caused by NATURAL security.
	Date		05-71-7661	1007.12.30	2021-126			1997-12-30	1998-03-11	1998-04-03	1998-04-03	1998-04-05	1998-04-03	1998-07-07	1998-46-48	1998-08-24		1998-08-24		1998-08-24	
	Serial #							0201019712E022											 		
	Tape #							300349												-	
	OF Ban Fix								EN120CE026	EN211CE064	ENZ/1/CEO66	EN211CE069		EN211CEU/U	EN211CE073	EN211CE074					
	- 1	Net Sign	2.1.0		2.1.0			,	21.1	2.1.1		2.1.1				2.1.1	2.1.1	211			2.1.1

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To CA Brazil / C.Freitas	Mr. Peter mccollough								Mr. Peter McCollough												
Description	Master Copy Master Copy Master Copy Master Copy December 1	ADACMP and ADADBS22 definitions were incorrect for fields 10, 10, 11,	PREDICT fix which is provided by Sources PREDICT objects in batch. PREDICT objects in batch. Shorten body of ENAT message 10031 to show the full text of CAT/STOW errors.	NATODE8 when invoking ENENTRY Impossible to invoke COMMAND NATURAL twice in a step as long as no GENERATE/DELETE was	coded NAT0979 in EN1014L / USR0210 in case NATURAL version 2.2.8+ or later is used (specification of NAT0979 in EN1014L / USR0210 in case Natural even if equal active library) library in NATURAL Security environments not allowed even if equal active library.	Help routine did not show 'No they avancous help or MENU as long as no valid selection MCT Maintenance Menu did not allow to press PF-Key END or MENU as long as no valid selection.	code was entered ENAT TP interface ENAT Indates to installation Manual, Administrator's	The new TP Interface has been aured when the new TP Manual and User's Manual.	EnNAT Documentation This version of ENAT is shipped with a full set of updated documentation.	Master Copy Start ENAT using ETID= '' instead of usend & 'B' / 'T.	Prevent from allocation error in case optional CA-Endevol Prevent from allocation error in case optional CA-Endevol Prevent from allocation TPI (map EN0000D was missing).	Error NA 1111 With Invariage 1. Trainer and 1111 With Invariant 1. Trainer ated incorrect SCL for stage number 2.	TPI does not pass the COMMENT into SCL (GENERALIE).	Provide a way to pass July cards to combinations only when validating the entities it triab measures. The recognizes the first 40 ENVISTG/SYS combinations only when validating the entities it industrial.	H.Q parameter did not work with RETRIEVE action.	11	+	1-1	1	十	
	111	1998-03-26 1998-09-30 1998-11-30	1008.11-30		1898-12-01	1998-12-21	1998-12-30		1998-12-30	1998-12-30	1999-02-06	1999-05-04	1899-05-21	1999-06-18	1999-08-02	1999-08-02	1999-08-0	1999-08-02	1999-08-02	1999-08-02	1999-08-02
	Serial # 0201029808E028 0201029808E029									0202009812E035											
	300325 300325															-			1		
	C/E-Req., Fix	EN211CE065 EN212CE076 EN212CE078		EN212CE079 EN212CE080	EN212CE081 EN212CE082	FN212CE083	EN212CE084				EN120CE027	EN220CE085	EN220CE088	EN220CE089	EN220CE092	ENZZOCE094	EN220CE095 FN220CE096	EN220CE097	EN220CE098	ENZZOCE101	EN220CE103 EN220CE107
	5	2.1.2	!	2.1.2	2.1.2	6 7 6	2.12	2.1.2	21.2		2.2.0	2.2.0	2.2.0	2.2.0	220	2.2.0	2.2.0	22.0	2.2.0	22.0	220

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10	Mr. Peter McCollough			9
Description default. EN9472X now replaces variable #\$vvv\$# and #\$VVV\$# to prevent from problems with tower to upper case translation in NATURAL editor. Show literal "Stage Number" instead of "Stage" on TPI maps. Show literal "Stage Number" instead of "Stage" on TPI maps. Enhance description of library usage in Installation Manual and describe what needs to be APF authorized. Strian "INTERFACE" replaced with "ENAT".	ENTPJCL completely revised, several problems corrected. Faxts for NATURAL RJE return codes corrected. Texts for NATURAL RJE return codes corrected. Introduce a new variable in ENTPJCL for DD STEPLIB. Allow setting of Generate Action on TPI NATURAL map. Allow setting of Generate Action on TPI NATURAL map. NAT3145 when working with PREDICT members for which a MCT entry exists. EN9309Z delivered as source The module EN9309Z in library EN is now delivered in source format. Allows users to invoke other routines than NATRJE is invoked.	Master Copy Only the first 40 entries in ENVIRONMENT/STAGE/SYSTEM table are recognized when Dany 11. Only the first 40 entries in ENVIRONMENT/STAGE/SYSTEM table are recognized when Dany 11. Stage number is not validated, no selection list is shown for TPI MOVE and DELETE actions, 10902 Stage number is not validated, no selection list is shown for TPI MOVE and then 2) PF3 is linvalid Action* with TPI GENERATE, MOVE and DELETE actions when 1) ENTER and then 2) PF3 is pressed. In case of CAT/STOW errors during GENERATE, ENAT does not show the variable parts of error messages.		
1999-08-02 1999-08-02 1999-08-05	1999-08-05 1999-08-05 1999-09-06 1999-09-06 1999-10-08	1999-10-08 1999-10-20 1999-10-30 2000-02-01	2000-02-08 2000-02-11 2000-01-19 2000-04-13 2000-05-26 2000-07-03	2000-07-03 2000-07-03 2000-08-15 2000-08-15 2000-11-26
##		0202019910E040		
# 90 #		313107		
CIE-Reg, Flx EN220CE108 EN220CE110 EN220CE113	ENZ20CE114 ENZ20CE119 ENZ20CE120 ENZ20CE122 ENZ20CE123 ENZ20CE123	EN220CE126 EN220CE127 EN221CE134	EN221CE136 EN212CE136 EN212CE138 EN21CE139 EN221CE140	ENZZICE147 ENZZICE149 ENZZICE169 ENZZICE163 ENZZICE163
Version 2.2.0 2.2.0 2.2.0 2.2.0	220 220 220 220 220 220 220 220 220	22.1	22.1 22.1 22.1 22.1 22.1 22.1	2.2.1 2.2.1 2.2.1 2.2.1 2.2.1

	Serial # 2001-04-01	Abend OC1 when CONAPI step is included in the Criver. Proceed to action when user is prompted to enter	
	2001-05-30	Entry of valid characters tot eteriorisments as short element name	
	2001.08-21	ADABAS RC 048 when executing multiple batch actions	
9.9.1 EN221CE1/1	2001-00-21	Allow definition of FUSER/FDIC file numbers 2233	
T	2001-09-28	BSTPPARS: E004 INVALID COMMAND VECKET in case (CCID is required when the corresponding prompt	
2.2.1 EN221CE176	2001-09-21	Avoid that user overwrites COmmissivi in case of a second of a sec	
11 EN221CE177		appears (RE INTEVE amount)	•
1	2001-12-06	Several properties with many recognition with NATURAL 3,x, Reason: NATURAL now resets the right of several properties with the resets of several properties with the resets of several properties with the resets of several properties of several	
2.2.1 ENZZICE180	2002-05-29	FUIC seturg in the a LOGON is executed. Source change in Charles each time a LOGON is executed.	T
2.2.1 EN2210E101	30 20 000	Inter RC 7101 from Userexit 71 during RETRIEVE of a Preductivol vernescribers 4.0.	T
T	200701-20	The state of the Elvat 2.2.1 together with Allr Usion Cludend Toge	
EN224CF197	2003-08-03	Operation in EN9200M in case of long variable massage parts. Community in EN9200M in case of long variable massage parts.	
1	2004-08-02	ENAT does not process PREDICT 4.3x objects	
+	2004-10-20	Endevor 4.0 SP2, A SET STOPRC field was added to paragraphic from the error taxts	
Ť	2004 10 152	Parkage processing for SYSERR message texts rais min root	
2.5.1 EN221CE203	201-01-4007	are very long.	
	2005-04-22	Not possible to leave field tevel help displiay when process and process to be a process to be	
2.2.1 EN221CE204		PF1.	
9063-01-00-0	2006-02-12	Enable Live i Talanicka Some	
2.2.1 ENZZIUCZUO	00 00	Chart for dunificate and non-existent entries in TYPE definition function 4.71.1.	
71020-0012	2006-03-20	Check for approach in elength for NATURAL 4 for all NATURAL programming to	
22.1 ENZTICEZO	2006-03-22	Isse UNCAT command to delete an existing object in target environment process and the and the part of	
\dagger	77-55-0007	prevent from NAT0082 at execution time with NATURAL 4 miles of	
		still exists in a different (step) little of the standard in case option Include PREDICT XREF is set	•
	2006-05-03	Long PREDICT member names (> to chais) are purposed.	
2.2.1 EN221CE210		to "F" on ADD paner. Resulting in Nove The Same member name to the MC I (Member name).	
TANSACE311	2006-09-26	I was possible to and deprese	
2.2.1		Colleges of NATURAL 4.2, all references to the old INPL and NATURAL CONTINUED	
24	2007-03-15	The to the requirement of the SYSOBJH, NATURAL Object Handler)	
7.7.7	24 60 TOOS	The list of NATURAL user exit routines required by ENAT has changed with the local of the list of NATURAL user exit routines required by ENAT has changed with the list of NATURAL user exit routines required by ENAT has changed with the list of NATURAL user exit routines are used to the list of NATURAL user exit	
221	2007-05-13	description has been updated for NATURAL 4.	
	35 50 2000	Several panels have been adapted to Endevor of requirements.	
221	CI-CO-1007	Till in the hear adailed.	-
7.4.1	2007-03-15	The Instantation less been controlled to the con	•

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Adam T. Bernstein Adam T. Bernstein					
via the E/NAT support					
TURAL 4.2 able as PDF documents					
Release to support NA documentation is availt AL 4.2]	·				
Description EINAT 2.2.2 is a Maintenance Release to support NATURAL 4.2 With this release of EINAT, all documentation is available as PDF documents via the EINAT support area on the Internet. Master Copy (cat with NATURAL 4.2) Master Copy (cat with NATURAL 4.1)					
Date 0.03-15 E. 2007-03-15 W 2007-03-15 M 2007-03-29 M					
Serial # 202020701E102 202020703E102					
C/E-Req., Fix Tape #					
Version CIE-R 2.2.1 2.2.1 2.2.2 2.2.2					